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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,385	10/01/2003	Victor Korol	P-5908-US	4436

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EXAMINER

GLENN, KIMBERLY E

ART UNIT PAPER NUMBER

2817

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/674,385

Applicant(s)

KOROL, VICTOR

Examiner

Kimberly E. Glenn

Art Unit

2817

SM

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 3/8/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,4-9,11-16,18,19,21-24 and 26-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15,16 and 33 is/are allowed.
- 6) ☒ Claim(s) 1,4-6,8,9,11-13,18,19,21-24,26 and 27 is/are rejected.
- 7) ☒ Claim(s) 7,14,28-32,34 and 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/14/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 15, 16, 18, 19, 21, 23, 24, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaynor et al US Patent 5,939,939 in view of Blodgett US Patent 5,430,418. (both of record)

Gaynor et al disclose a communication device comprising a combiner 518, a first and second amplifier 538 540 which provides an output to a load 416. Examiner is considering the amplifiers to be active components. Amplifiers 538 and 540 provide the signals inputted into the combiner.

Thus, Gaynor et al is shown to teach all the limitations of the claims with the exception of the combiner being composed of a first capacitor, a first inductor, a shared capacitor, a second capacitor, and a second inductor, the capacitance of the first capacitor and second capacitor being different from the capacitance of the shared capacitor and the shared capacitor combining the first and second signals of the first and second power amplifier.

Blodgett teach in FIG. 1, a power combiner comprising of capacitor 111 (shared capacitor), capacitor 113, capacitor 115, inductor 117, inductor 119 and resistor 121. The capacitance of capacitor 111 is preferably equal to twice the capacitance of either

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capacitor 113 or capacitor 115, which are preferably of the same value. The values of the capacitors, inductors and resistors are preferably chosen so that the embodiment acts as an impedance inverter.

One of ordinary skill in the art at the time of the invention would have found to obvious to replace the combiner of Gaynor et al with the combiner as taught by Blodgett. The motivation for this modification would have been to provide the advantageous benefit of combiner, which exhibits uniform impedance at all its ports.

Claims 5, 6 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaynor et al US Patent 5,939,939 in view of Blodgett US Patent 5,430,418 in combination with Kobayashi US Patent 6,252,463. (all of record)

Gaynor et al and Blodgett disclose a communication device comprising a combiner 518, a first and second amplifier 538 540 which provides an output to a load 416. See the above 35 USC 103 rejection for details of Gaynor et al and Blodgett references.

Thus, Gaynor et al and Blodgett are shown to teach all the limitations of the claims with the exception of the amplifier being composed of bipolar transistors.

Kobayashi discloses in prior art figure 1, amplifier comprising a bipolar transistor.

One of ordinary skill in the art at the time of the invention would have found it obvious to replace the general amplifiers of Gaynor et al with the bipolar transistor amplifier as taught by Kobayashi since examiner takes notice of the equivalence of the general amplifier of Gaynor et al and the bipolar transistor amplifiers of Kobayashi for

their use in the communication art and the selection of any of these known equivalents to provide an amplified signal would be within the level of ordinary skill in the art.

Claims 8,9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaynor et al US Patent 5,939,939 in view of Blodgett US Patent 5,430,418 in combination with Bishop US Patent 6,337,666. ( all of record)

Gaynor et al disclose a communication device comprising a combiner 518, a first and second amplifier 538 540 which provides an output to a load 416. Examiner is considering the amplifiers to be active components. Amplifiers 538 and 540 provide the signals inputted into the combiner.

Thus, Gaynor et al is shown to teach all the limitations of the claims with the exception of the combiner being composed of a first capacitor, a first inductor, a shared capacitor, a second capacitor, and a second inductor, the capacitance of the first capacitor and second capacitor being different from the capacitance of the shared capacitor and the shared capacitor combining the first and second signals of the first and second power amplifier and the antenna being a dipole antenna.

Blodgett teach in FIG. 1, a power combiner comprising of capacitor 111 (shared capacitor), capacitor 113, capacitor 115, inductor 117, inductor 119 and resistor 121. The capacitance of capacitor 111 is preferably equal to twice the capacitance of either capacitor 113 or capacitor 115, which are preferably of the same value. The values of the capacitors, inductors and resistors are preferably chosen so that the embodiment acts as an impedance inverter.

One of ordinary skill in the art at the time of the invention would have found to obvious to replace the combiner if Gaynor et al with the combiner as taught by Blodgett. The motivation for this modification would have been to provide the advantageous benefit of combiner which exhibits uniform impedance at all the ports.

Bishop discloses a dipole antenna unit that is lightweight, compact, highly reliable, and efficiently produced.

One of ordinary skill in the art at the time of the invention would have found to obvious to replace the general antenna of Gaynor et al with the dipole antenna unit as taught by Bishop. The motivation for this modification would have been to provide the advantageous benefit of antenna which is lightweight, compact, highly reliable, and efficiently produced.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaynor et al US Patent 5,939,939 in view of Blodgett US Patent 5,430,418 in view of Bishop US Patent 6,337,666 in combination with Kobayashi US Patent 6,252,463. (all of record)

Gaynor et al disclose a communication device comprising a combiner 518, a first and second amplifier 538 540 which provides an output to a load 416. Examiner is considering the amplifiers to be active components. Amplifiers 538 and 540 provide the signals inputted into the combiner. See the above 35 USC 103 rejection for details of Gaynor et al, Blodgett and Bishop references.

Thus, Gaynor et al, Blodgett and Bishop are shown to teach all the limitations of the claims with the exception of the amplifier being composed of bipolar transistors.

Kobayashi discloses in prior art figure 1, amplifier comprising a bipolar transistor.

One of ordinary skill in the art at the time of the invention would have found it obvious to replace the general amplifiers of Gaynor et al with the bipolar transistor amplifier as taught by Kobayashi since examiner takes notice of the equivalence of the general amplifier of Gaynor et al and the bipolar transistor amplifiers of Kobayashi for their use in the communication art and the selection of any of these known equivalents to provide an amplified signal would be within the level of ordinary skill in the art.

***Allowable Subject Matter***

Claims 7, 14 and 28-32, 34 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 15, 16 and 33 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: With regards to claims 7, 14-16, 28 and 33, the prior art of record does not disclose a filter for filtering out the second harmonic of the first and second signals. With regards to claims 29, 31, and 34, the prior art of record does disclose or fairly teach an impedance transformer providing dc voltage to the first and second active components. With regards to claims 30, 32 and 35, the prior art of record does not disclose or fairly teach the first active component being able to set the first capacitance of the first capacitor of the first capacitor inductor capacitor impedance converter to a positive capacitance and the second active component being able to set the first

capacitance of the second capacitor of the first capacitor inductor capacitor impedance converter to a negative capacitance.

### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E. Glenn whose telephone number is (571)-272-1761. The examiner can normally be reached on Monday-Friday 7:30 to 4:00.




If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimberly E Glenn  
Examiner  
Art Unit 2817

keg



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